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00-133

September 15, 2000

Mr. Dale Hatfield
Office of Engineering and Technology
Federal Communications Commission
445 12th Street, SW, Room 7-A-340
Washington, DC 20554

Re: **Final Service Disruption Report**

Dear Mr. Hatfield:

Pursuant to the requirements established in the Report and Order in CC Docket No. 91-273 (Amendment of Part 63 of the Commission's Rules to Provide for Notification by Common Carriers of Service Disruptions), **PACIFIC BELL** submits the attached **Final Service Disruption Report** associated with a service disruption in **Fullerton, California** on **August 17, 2000**.

An Initial Service Disruption Report was faxed to the FCC's Monitoring Watch Officer on that date.

Please stamp and return the provided copy to confirm your receipt. Please contact me if you have questions regarding this service disruption.

Sincerely,

A handwritten signature in cursive script that reads "Jonathan J. Boynton". The signature is written in dark ink and is positioned below the word "Sincerely,".

Enclosures

CC: Bob Kimball
Kent Nilsson



A member of the SBC global network

Retention Period: 6 Years

FCC SERVICE DISRUPTION REPORT

Type of Report: ☐ Initial Report ☐ Update ☒ Final

Occurred: Date: 08/18/2000 Time: 00:08 PDT

Ended: Date: 08/18/2000 Time: 00:39 PDT

Duration (in minutes): 31 minutes

- ☒ 50,000 or More Customers
- ☐ 30,000 - 49,999 Customers
- ☐ Fire incident \geq 1,000 lines
- Special Offices/Facilities
 - ☒ 911
 - ☐ Major/Medium Airport
 - ☐ NCS Request

Geographic Area Affected: Fullerton, California

Estimated Customers Affected: 89,000

Type(s) of Services Affected: ☐ Local (Intraoffice) ☐ IntraLATA ☐ InterLATA ☐ 800
☐ LIDB ☐ Operator Services ☐ Interexchange ☐ Switched Access (interoffice)
☐ Cellular ☐ International ☒ E911/911 ☐ FAA ☐ All

Estimated Blocked Calls: 34

Apparent or Known Cause of the Outage: The Fullerton, California Public Safety Answering Point (PSAP) lost commercial power at 00:08 on August 18, 2000. The customer's Uninterrupted Power Supply (UPS) was incorrectly set, causing the PSAP positions to work incorrectly. The generator on site bypassed the UPS. The Fullerton PSAP notified the Anaheim PSAP via cell phone and instructed them to engage the alternate answer key. Fullerton assumed calls were being re-directed to Anaheim at this point. Fullerton PSAP personnel did not place any test calls from the payphone on the premises to verify that transfer was successful, due to focus placed on restoring power. Standby power was restored at 00:39 and at that time the Fullerton PSAP started receiving 911 calls, which indicated that the alternate answer switch at the Anaheim PSAP had never activated. The Fullerton PSAP re-tested the alternate answer switch and again, it failed. Once commercial power was restored at 01:40 and the Fullerton site was stable, a technician went to the Anaheim PSAP to further investigate the alternate answer switch problem. The alternate transfer circuit was fixed at 14:32 on August 18, 2000 when an open jumper at Anaheim01 central office was reconnected. Alternate answer was last tested in mid-November for Y2K and worked at that time.

Root Cause of the Outage: INEFFECTIVE FAULT RECOVERY OR RE-INITIALIZATION ACTION – Simple, single-point failure resulting in failure of protection switch to standby.

Name and Type of Equipment Involved: Customer's (Fullerton PSAP) premise equipment

Specific Part of Network Involved: Jumper wire in Anaheim01 central office

Methods used to Restore Service: Once commercial power restored and the Fullerton PSAP site was stable, a technician replaced a jumper wire in Anaheim01 central office and tested the alternate answer switch, verifying it would transfer calls.

Steps Taken to Prevent Recurrence:

Pacific Bell began implementing the Network Control Modems (NCM) on August 29, 2000 to critical 911 tandems. The NCM will alert and prevent a possible disruption of service.

Pacific Bell has been working with Lucent and Nortel to incorporate an alarm associated with the alternate answer key. Alarming scheme should be available by the end of October 2000 with full deployment by the end of November 2000.

Pacific Bell sent a communique to all PSAPs recommending they regularly test their alternate transfer switch for correct functionality. This communique was sent via certified mail July 1, 2000.

Applicable Best Practices: Pacific Bell reviewed the Network Reliability: The Path Forward, Focus Group IV Essential Communications During Emergencies, dated January 12, 1996 and Network Reliability: A Report to the Nation, Compendium of Technical Papers, dated June 1993 and evaluated all recommendations and best practices. Based on the Root Cause analysis the most appropriate focus areas are:

The Path Forward, Focus Group IV Essential Communications During Emergencies
Reference: Section 6.2 Alternate Path when the Primary 9-1-1 Interoffice Facility Fails

- Recommendation 6.2.2 Alternate PSAPs from the Serving End Office

A Report to the Nation, Compendium of Technical Papers
Reference: Section 6.1 Defensive Measures for Interoffice Facilities

- Recommendation 6.1.3.1 Alternate PSAPs

Best Practices Used: Pacific Bell observes those practices that are consistent with providing outstanding customer service.

Analysis of Effectiveness of Best Practices: Fullerton PSAP has the ability to switch 911 traffic to the Anaheim PSAP for alternate answer.

Prepared by: Denise Buschfort
Date submitted: 09/15/2000

Telephone: 210-886-4586
Time: 15:50 CDT

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Retention Period: 6 Years

FCC SERVICE DISRUPTION REPORT

Type of Report:

☒ Initial Report☐ Update☐ Final

Occurred: Date: 08/17/2000 Time: 23:53 PDT

Ended: Date: 08/18/2000 Time: 00:34 PDT

Duration (in minutes): 31 minutes

- ☐ 50,000 or More Customers
☐ 30,000 - 49,999 Customers
☐ Fire incident \geq 1,000 lines
Special Offices/Facilities
☒ 911
☐ Major/Medium Airport
☐ NCS Request

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- ☐ Local (Intraoffice) ☐ IntraLATA ☐ InterLATA ☐ 800
☐ LIDB ☐ Operator Services ☐ Interexchange ☐ Switched Access (interoffice)
☐ Cellular ☐ International ☒ E911/911 ☐ FAA ☐ All

Estimated Blocked Calls: 34

Apparent or Known Cause of the Outage: At 23:53 PDT, on Thursday, August 17, 2000 a car accident into a power pole caused a commercial power outage to the Fullerton Police Public Safety Answering Point (PSAP). The Fullerton Police PSAP has an UPS (Uninterrupted Power Source) which did not operate as designed because it was in bypass mode. The Anaheim Police PSAP threw the toggle switch provided by Pacific Bell which was supposed to route 911 calls from the Fullerton Police PSAP to the Anaheim Police PSAP. Anaheim Police PSAP personnel did not test to make sure 911 calls were rerouted nor did they notify Pacific Bell of the event. The toggle switch at the Anaheim Police PSAP did not function properly. There were 34 abandoned 911 calls during the outage.

Name and Type of Equipment Involved: Under Investigation

Specific Part of Network Involved: E911

Methods used to Restore Service: Service was restored by the Fullerton Police PSAP personnel by taking the UPS out of the bypass mode.

Prepared by: Jim Lankford
Date submitted: 08/18/2000

Telephone: 210-886-4589
Time: 17:10 PDT